



IFCW 2137
Patent

Attorney's Docket No. K35A1023 (1032806-000027)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of) **Mail Stop Amendment**
Thomas D. Hanan)
Application No.: 10/003,675) Group Art Unit: 2137
Filed: October 31, 2001) Examiner: Jeffrey D. Popham
For: METHOD FOR INSTALLING A) Confirmation No.: 5322
PORTAL TO A PROTECTED AREA)
OF A DISK DRIVE)
)
)

REQUEST FOR RECONSIDERATION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated March 22, 2006, reconsideration and allowance of the present application are respectfully requested. Claims 1-6 remain pending in the application.

On pages 2-3 of the Office Action, the Examiner indicates that previous arguments have been deemed fully considered and persuasive. However, in the paragraph bridging pages 2-3 of the Office Action, the Examiner asserts: "Taking applicant's interpretation of Mankefors, the claims can still be rejected, but in a different way than before." Beginning with the first full sentence on page 3 of the Office Action, the Examiner asserts: "In the current rejections using Mankefors, the mailbox file is the software that is being installed and used on the computer unit."

Contrary to the Examiner's assertion, the Mankefors document cannot be interpreted to read on Applicant's presently claimed invention. The Mankefors document is directed to a method for preventing an authorized reproduction of software (see Abstract). This document does not teach or suggest, *inter alia*, a disk

drive which can perform an executable function characterized by contents of a mailbox file which has been created using an access key, as recited in Applicant's claim 1.

On page 4 of the Office Action, claims 1, 4 and 5 are rejected under 35 U.S.C. §102(e) as being anticipated by the Mankefors document (i.e., U.S. Patent Publication No. 2002/0010863). The Examiner asserts on page 4 of the Office Action that the Mankefors document discloses, at page 4, paragraph [0036] and page 6, paragraph [0050] "Obtaining a disk drive access key from an access key server, the access key being generated by the access key server as a function of an identifying characteristic of the disk drive." The Examiner cites page 4, paragraph [0036] and page 5, paragraph [0038] of Mankefors as disclosing "Creating a mailbox file (the software being installed) in the first range of addressable locations using the access key obtained from the access key server." These same portions of the Mankefors document are cited as disclosing "Notifying the disk drive of a location of the mailbox file in the first range of addressable locations, wherein the disk drive can perform an executable function characterized by contents of the mailbox file."

The cited portions of the Mankefors document fail to teach or suggest Applicant's claim 1 combination. For example, the software being installed in Mankefors is executed by the host CPU, and not the disk drive. Moreover, the disk drive in Mankefors is not notified of the location of the software.

Paragraph [0038] of the Mankefors document describes a verification procedure used to save control information (flags) in a location 14 which is accessible by a computer unit 11. The storage and verification of the flags certifies authorized use of the program. The verification routine involving use of the flags

does not, however, constitute an executable function characterized by contents of the mailbox file. Indeed, the software, which is executed by the host CPU of the Mankefors document upon compliance with the verification procedure, does not constitute a mailbox file which has been created in a first range of addressable locations using an access key obtained from an access key server, as recited in Applicant's claim 1.

In order to show that the disk drive does perform an executable function, the Examiner suggests that "[o]n subsequent access attempts, the disk drive will perform this search . . . in order to obtain the flags." In fact, the disk drive does not perform a search, rather the host performs the search and directs the disk drive to retrieve the flags from known locations. The disk drive disclosed in Mankefors does not perform an executable function characterized by the contents of a mailbox file.

In addition, Mankefors does not disclose or suggest that a disk drive is notified of a location of a mailbox file in a first range of addressable locations as recited in Applicant's claim 1. Whether the mailbox file is considered to be the flags or the software, the disk drive in Mankefors is never notified of the location of this data. As is well known to those of skill in the art, a disk drive performs reading and writing functions based upon the addressable locations of accessed files. But, Mankefors does not teach or suggest that the disk drive is notified of the location of a mailbox file.

Therefore, the Mankefors document does not teach or suggest Applicant's claim 1 which includes, among other features, obtaining a disk drive access key from an access key server, the access key being generated as a function of an identifying characteristic of the disk drive; and creating a mailbox file in a first range of

addressable locations using the access key. In addition, the Mankefors document does not teach or suggest notifying a disk drive of a location of such a mailbox file in a first range of addressable locations, wherein the **disk drive** can perform an executable function characterized by the contents of the mailbox file.

On page 5 of the Office Action, claims 4 and 5 are rejected under 35 U.S.C. §102(e) as being anticipated by the Mankefors document. Claim 4 recites, *inter alia*, recognizing a command from a host operating system in reference to the mailbox file and responding to the command by performing within the disk controller an executable function characterized by the contents of the mailbox file. For at least the reasons given above, Mankefors does not teach or suggest a disk drive, or disk controller, that can perform an executable function characterized by the contents of a mailbox file. Therefore, for similar reasons, the Mankefors document does not teach or suggest Applicant's claim 4.

On page 6 of the Office Action, claims 4 and 5 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,559,960 (Lettvin). The Lettvin patent is directed to a software anti-virus facility. In rejecting claims 4-5 on page 6 of the Office Action, the Examiner asserts that column 4, line 64 - column 5, line 9 of Lettvin disclose a mailbox file (which the Examiner characterizes as an "application program"), and disclose performing an executable function characterized by contents of the mailbox file. The Examiner asserts that "This executable function is the accessing of the hidden partition, and subsequent transferring of the anti-virus, disk-maintenance, and/or other software, that the host OS cannot access, to the host."

The Lettvin patent fails to teach or suggest Applicant's claim 4 combination, which includes, among other features, recognizing a command from a host operating

system in reference to the mailbox file associated with the first range of disk drive host interface addressable locations; and responding to the command by performing **within the disk controller** an executable function characterized by the contents of the mailbox file.

The Examiner asserts that Lettvin teaches that the disk drive performs an executable function of accessing a hidden partition and transferring anti-virus, disk-maintenance or other software to the host, pointing to Column 4, line 64 to Column 5, line 9. However, Lettvin does not in fact disclose that the disk drive is performing such a function. In fact, Lettvin discloses that the application program being executed by the host accesses the hidden partition through BIOS or BTOS calls (see Column 4, lines 57-63), and the disk drive never performs an executable function to access the hidden partition to transfer anti-virus or other software to the host. Column 4, lines 64-65 of the Lettvin patent specifically describe the "application program" as causing "the computer" (as opposed to the disk drive) to execute the anti-virus or other software. Therefore, the "application program" highlighted by the Examiner cannot correspond to the claimed mailbox file, and claim 4 is allowable over the Lettvin patent.

On page 7 of the Office Action, claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mankefors in view of U.S. Patent No. 6,681,304 (Vogt). The Vogt patent fails to overcome deficiencies already described with respect to the Mankefors document. Therefore, for at least the reasons given above, these claims should be considered allowable.

On page 8 of the Office Action, claims 1-3 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,966,002 (Torrubia-Saez) in

view of U.S. Patent No. 6,728,830 (Assaf). There would have been no motivation or suggestion to have combined the Torrubia-Saez patent with the Assaf patent in the manner suggested by the Examiner.

The Torrubia-Saez patent is directed to secure distribution of software, and in this regard, is considered no more relevant to the presently claimed invention than the Mankefors document. As with the Mankefors document, the Torrubia-Saez patent is directed to the storage of files on a disk drive, using commands which are executed by a host CPU, and not the disk drive. An access key may be generated in Torrubia-Saez, but this access key does not provide access to a mailbox file, wherein the disk drive can perform an executable function characterized by the contents of that file.

The Assaf patent, on the other hand, teaches that “[w]ith virus scanning or detecting software in the reserve area and therefore resident on the disk, the disk drive hardware or firmware checks for viruses periodically or after a certain amount of time after not received a command.” Column 6, lines 53-57. The Assaf patent does not disclose or suggest obtaining a disk drive access key from an access key server, and creating a mailbox file using that access key.

The Examiner suggests that the Torrubia-Saez and Assaf patents could have been combined in order to allow the disk drive to store critical information needed for proper operation of the disk drive in an area to which the host OS and user cannot access. However, there is no suggestion in Torrubia-Saez to enable the disk drive to perform an executable function characterized by the contents of a mailbox file (all executable functions are conventionally performed by the host in Torrubia-Saez), and there is no suggestion in Assaf to obtain a disk drive access key from an access

key server. Neither of these documents teaches or suggests use of an access key generated as a function of an identifying characteristic of a disk drive, creating a mailbox file using such an access key, and notifying the disk drive of a location of the mailbox file, wherein the disk drive can perform an executable function characterized by contents of the mailbox file. At best, a combination of these two patents would have resulted in storing the host-executable files of Torrubia-Saez on a disk drive, and storing Assaf's virus detection software, which runs independently of any disk drive access key, on the disk drive. There would have been no motivation or suggestion to make the host-executable files of Torrubia-Saez disk drive-executable, or to create Assaf's virus detection software using an access key. For at least these reasons, the rejection of claim 1 over these patents should be withdrawn.

On page 10 of the Office Action, claim 6 is rejected under 35 U.S.C. §103(a) as being unpatentable over Mankefors in view of Torrubia-Saez. Claim 6, like the remaining dependent claims 2-3 and 5, recites additional advantageous features, which further distinguish over the documents relied upon by the Examiner. As such, all of these claims, like the independent claims, are allowable over the cited art.

In light of the foregoing, the present application is in condition for allowance and a Notice of Allowance is respectfully solicited. Should the Examiner have any questions regarding any of the above, it is respectfully requested that the undersigned be contacted at the number shown below.

Entry of the foregoing amendments and allowance of the present application
are respectfully requested.

Respectfully submitted,

BUCHANAN INGERSOLL PC

Date: June 22, 2006

By:


Patrick C. Keane
Registration No. 32858

P.O. Box 1404
Alexandria, VA 22313-1404
703.836.6620